South Carolina
Office of Regulatory Staff

THE WATER WELLSPRING

A Flowing Source of Information for Water and Wastewater Utilities

Summer 2014

EPA REVISES TOTAL COLIFORM RULE

In April 2016, the newly Revised Total Coliform Rule (RTCR) goes into effect and will require all water utilities to determine the probable cause of all positive samples and correct them.

Coliform intrusion occurs when there is a break in the treatment process from source water, and it can contaminate treated water within the distribution pipeline system. Pretreatment, filtration and chemical coagulation are ways to remove bacteria from the water before it enters the treatment plant. Routine system maintenance, cleaning, relining corrosive pipes, and flushing can reduce coliform and other bacteria in the lines. The utility should have a coliform control plan and schedule to reduce coliform occurrences.

For the final rule to the RTCR, visit the EPA's website at: http://water.epa.gov/lawsregs/rulesregs/sdwa/tcr/regulation_revisions.cfm

Cite:LeChevallier, M. (2014, May). Prepare for the revised total coliform rule. *Opflow*, *40*, 14-18.

GROSS RECEIPT FORMS MAILED

The Gross Receipt Assessment Form has been mailed to all water and wastewater utilities. The form must be completed, notarized, and returned to the Office of Regulatory Staff no later than August 31, 2014, in order for your company to continue operating in South Carolina. If you have any questions or did not receive your form, please contact us at (803) 737-0800.

2014 CLIMATE UPDATE

By: Hope Mizzell, Ph.D., SC State Climatologist

Record rainfall during 2013 helped end a lengthy drought for South Carolina. Normal to slightly above-normal rainfall this past winter and spring was sufficient to provide additional recharge to our State's surface and groundwater supplies. Winter and spring rains are important for recharging both surface water and groundwater levels typically lowered during the warmer months. Figure 1 shows the December through February rainfall totals from 1896-2014. Figure 2 shows the March – May rainfall totals from 1896-2014. The solid black line in both graphs is the 1901-2000 average.

Confusion exists as to whether snow and ice play a critical role in groundwater recharge. This occurrence is not the case in South Carolina since snow and ice events are sporadic and the snow cover is generally low. The water equivalent of snow is much lower than expected and usually ranges from 7% to 20% depending on the air temperature. So even with a 10 inch snow event, the melted water equivalent would generally be less than 1.00 inch.

We are entering the hot summer months of 2014 with water supplies generally high enough to withstand a short-term dry period, but reserves can quickly drop due to increased evaporation and demand without adequate rainfall. We need at least one inch of rain every week during the summer to keep up with water loss from evaporation. Summer precipitation is normally the greatest in South Carolina, but also the most variable and unpredictable, since it occurs mostly in connection with showers and thunderstorms.

Figure 1: South Carolina Statewide December - February Precipitation (inches), 1895-2014

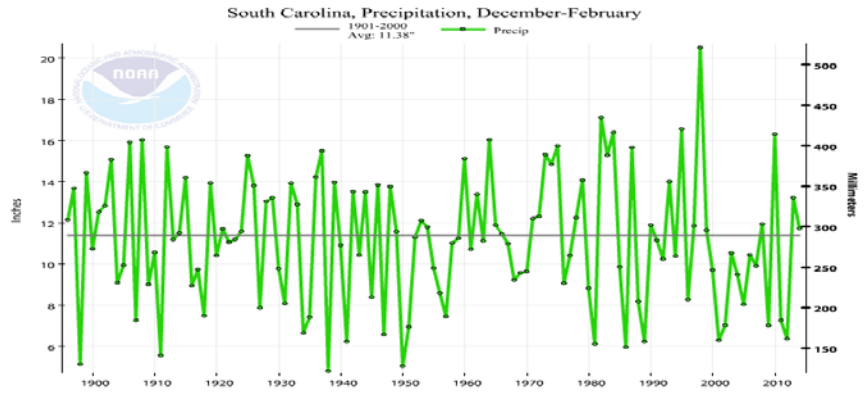
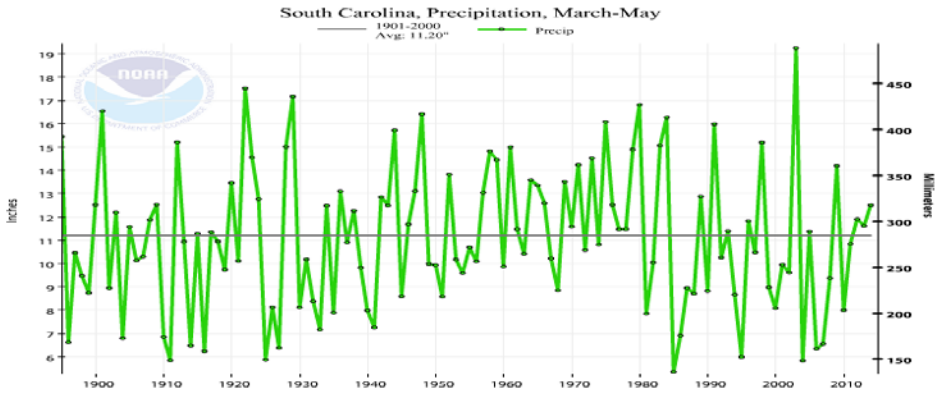
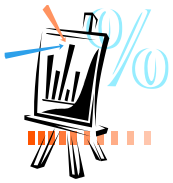


Figure 2: South Carolina Statewide March – May Precipitation (inches), 1895-2014



The Audit Corner

RATE OF RETURN vs. OPERATING MARGIN



When seeking to modify their tariffs, utility companies must decide the best way to determine a fair rate of return on their investments. Some companies have a large investment in plant while other companies do not or may have large amounts of donated plant. A utility company then has to decide whether to use Rate of Return or Operating Margin as a measurement of profitability for regulatory purposes.

What is a Rate of Return (ROR)? Compensation to the investor is expressed as a percentage computed by dividing Net Operating Income from utility operations by Rate Base. An adequate Rate of Return (ROR) should produce earnings that will meet the debt service needs and provide income sufficient to attract investors.

When should Rate of Return methodology be used? This method should be used when a company has adequate investment in plant and service that will support a meaningful and measurable ROR. (Hannah, not sure if you are saying in plant *and* service?)

How is the appropriate Rate of Return determined? The ROR has a debt component and an equity return portion. The debt cost and rates are known information received from financial institutions. The equity return is determined by an economist using valuation methods such as Discounted Cash Flow (DCF) and Capital Asset Pricing Model (CAPM) comparing the utility seeking an increase in rates with the returns being experienced by other, similarly situated utilities. In determining a fair ROR, consideration is normally given for maintenance of financial integrity, ability to attract capital, business risk, the quality of service provided, and cost of capital.

Does the ORS make recommendations for Return on Equity (ROE)? The ORS economist makes ROE recommendations, using valuation pricing models, in various cases as needed.

What is an Operating Margin? An operating margin is compensation to the investor determined by a percentage measurement of Net Income (less Interest Expense) divided by Operating Revenues.

When should an Operating Margin be used? When a company has a small rate base or a rate base that has been reduced by depreciation, donated plant or contributions in aid of construction, an Operating Margin should be considered.

What is the ORS' recommended Operating Margin range? For most water and wastewater cases, the ORS recommends an Operating Margin between 10% - 15%.

If you have any additional questions, please contact Jay Jashinsky (803-737-1984) or Sharon Scott (803-737-0964) of the ORS Audit Department.

Source: Regulated Utilities Manual of Deloitte & Touche USA LLP

PROMOTING A POSITIVE IMAGE

It usually takes about seven seconds to make a first impression. And if you make a bad impression the first time around, there are no second chances. Here are a few ways to ensure your utility employees make a good first impression for your customers:

- Dress professionally. Make sure uniforms and shoes are in good condition. The utility name should be prominently displayed on the uniform.
- Ensure the utility's equipment is properly working and contains the utility name.
- Remove shoes before entering a customer's home. This shows courtesy to the customer's residence.
- Show ID – ALWAYS! Make sure ID is in good condition and current. Don't wait for the customer to ask.
- Leave a utility calling card, including a contact number, for the customer in case they have additional questions after the employee leaves.
- Clean up the mess workers leave behind – including mud/excessive dirt and debris on subdivision roads.
- Meet and Greet. Get out and meet the customers. They may have issues they want to discuss and just want to be heard. Here's an opportunity to listen and make them feel valued.

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